Data-Informed Diplomacy

Goal Leader(s):

Matthew Graviss, PhD – Chief Data Officer

The U.S. Department of State aims to …

The Department's global workforce will be empowered with the skills and tools to derive actionable mission insights from data, and its data assets will be securely shared and effectively managed. By September 30, 2023, in alignment with the eight implementation themes of its first-ever Enterprise Data Strategy, the Department will have doubled workforce training in data analytics, increased the use of enterprise analytics products by 50%, increased the number of organizational units leveraging common analytics infrastructure, quadrupled the ingestion of data assets into the Department's Data Inventory/Data Catalog, and published a modern enterprise data policy.

Goal Overview

Problem to Be Solved

- Data consumers across the Department of State need to be able to access trusted data in a timely manner to support decision-making.

- Several impediments include, but are not limited to, data literacy, access to data training, access to data assets, access to modern analytic platforms, secure data management and storage, and transparent and effective governance.

What Success Looks Like

- The Department of State's global workforce will be empowered with the skills and tools to derive actionable mission insights from data assets that are securely and effectively managed and utilized.

- To this end, by enhancing its data discovery, access, and governance capabilities, the Department of State will enhance the data acumen of its global workforce, as well as improve the tools and processes at its disposal, to drive more effective data-informed decision making at all levels.

Goal target(s)

In the table below, please repeat the key metrics included in the goal statement (previous slide) that will be used to track progress.

Please update **this column** each quarter.

Achievement statement		Key indicator(s) A "key performance indicator" measures progress toward a goal target	Quantify progress These values enable us (and you!) to calculate % complete for any type of target*			Frequency When is there new data?
By…	**We will…**	**Name of indicator**	**Target value**	**Starting value****	**Current value**	**Update cycle**
Q4 FY 2023	Increase data analytics trainings by 100%	Number of person-hours trained (includes full trainings, modules in larger non-data-specific trainings, FSI Courses, and online self-study courses)	8,400 person-hours per quarter (52,500 total person hours by the end of FY 2023)	4,200 person-hours per quarter	4,702	Quarterly
Q4 FY 2023	Increase the number of uses of data and analytics products across the Department by 50%	Number of uses of data assets housed on M/SS/CfA common infrastructure. Uses is defined as user sessions and views for interacting with myriad data products across multiple platforms.	89,588 uses per quarter	59,725 uses per quarter	Will be N/A for Q1, as Q1 will be baseline	Monthly
Q4, FY 2023	Reduce redundant infrastructure through more universally accessible and applicable data analytic tools.	Number of organizational units below the bureau/office level leveraging common Analytics infrastructure (Including but not limited to: Tableau, Azure, ArcGIS, databricks, etc.)	110	55	68	Monthly
Q4, FY 2023	Quadruple the number of data assets available on the Enterprise Data Inventory.	Number of data assets available on data.state.sbu	520	129	193	Quarterly
Q2, FY 2022	Update Department data policy in the FAM.	Data Policy Update	1 – Complete	0 – Not Complete	0	N/A
Q3, FY 2022	Publish enterprise guidance on data policy and management via ALDAC or issue paper.	Data Policy and Management Guidance	1- Complete	0 – Not Complete	0	N/A

* Even qualitative targets! If the target is to achieve a qualitative outcome, quantify progress this way: 1="Yes, we achieved it", 0="No, not yet"
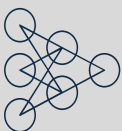
** As of 10/1/2021

Goal Team

M | Strategy & Solutions
U.S. DEPARTMENT of STATE

Cultivate a Data Culture

Accelerate Decisions through Analytics

Establish Mission-Driven Data Management

Enhance Enterprise Data Governance

The Office of Management Strategy & Solutions (**M/SS**) is the home of the Center for Analytics (**M/SS/CfA**). Led by the Department's **Chief Data Officer (CDO)**, CfA is charged with improving the Department workforce's ability to leverage data as a strategic asset and more efficiently and effectively use data to inform decisions at all organizational levels and all over the world.

The **Enterprise Engagement and Communications team** (**CfA/EEC**) works to enhance employees' capacities to effectively use data for informed decision making through training (**FSI**), building a force of skilled data specialists, and fostering a culture of data and analytics enterprise wide.

The **Enterprise Analytics team** (**CfA/EA**) uses data and analytics to help solve mission and management challenges by advising, enabling, and partnering with entities across the enterprise.

The **Technology Modernization team** (**CfA/Tech**) is a hybrid organization that is aligned to both the CDO and the Chief Information Officer (**CIO**) in the **Bureau for Information and Resource Management (IRM**). This team is continuously researching and developing tools that will make siloed information discoverable and interoperable.

The **Enterprise Data Management team (CfA/EDM)** is responsible for building the Department's capacity to inventory, align, govern, secure and leverage data from across the enterprise. It is also charged with modernizing the Department's data policies and leading the execution of the Department's first-ever Enterprise Data Strategy.

| Goal Strategies	Objectives	Indicators and Milestones	Impact
Cultivate a Data Culture: Train, incentivize, and recruit a workforce that routinely seeks, values, and fluently utilizes data for decision-making at all levels of the enterprise.	• Strengthen Data Fluency • Create a Data culture that accepts the use of multiple forms of evidence in decision making • Enhance Data Collaboration • Hire for the Future from existing vacancies.	• Number of person-hours trained • Count of civil service positions in data science job series (1560) • Launch pilot program with external data analytics training platform • Develop new discrete data and analytics training modules to include in existing internal training courses for civil servants, FSOs, and Senior Leadership. • Develop and implement in partnership with industry, scalable data science training services via virtual training platforms.	Increased data fluency empowers employees and decision makers to make data informed policy decisions that more effectively advance U.S. foreign policy priorities.
Accelerate Decisions through Analytics: Empower the Department's global workforce to routinely utilize data by providing easy access to the Department's data assets, modern analytics tools, and customer support services.	• Deliver Analytic Products • Provide Modern Analytic Tools and platforms • Pilot and Scale Artificial Intelligence and Machine Learning Applications	• Number of organizational units below the bureau/office level leveraging common Analytics infrastructure • Number of data assets available on data.state.sbu • Discover and catalog existing analytics products from other bureaus.	Providing the workforce with data tools and analysis enables evidence-based decision-making across mission and operational activities.
Establish Mission-Driven Data Management: Implement a common technical approach to effectively create, collect, store, protect, and share data across the Department, the interagency, and with the public.	• Enable Access to Data • Define Data Architecture • Define and Implement Data Standards • Establish Data Quality Program	• Number of uses of data assets housed on M/SS/CfA common infrastructure • Officially launch Data.State, the Department workforce's interface to the data inventory and data catalogue • Integrate campaign data assets from Management and Mission Themes	Mission-driven data management improves the depth, breadth, and quality of analysis possible with the Department's data, while making more efficient use of the resources needed for maintenance throughout its lifecycle
Enhance Enterprise Data Governance: Enable management oversight and coordination of DoS data through effective stewardship, policies, process controls, and	• Institute Data Governance Operating Model • Develop Data Policy • Measure the Organizational Value	• Data Policy Update • Data Policy & Management Guidance • Complete data campaigns	Consistent data governance throughout the Department advances the ability of Bureaus and Offices to more easily manage, share, and use the Department's data, while

Key indicators

| Indicator Title	Current Value	FY 2022 Target	FY 2023 Target
Number of person-hours trained (includes full trainings, modules in larger non-data-specific trainings, FSI Courses, and online self-study courses)	*4,702*	**22,050 hours**	**52,500 hours**
Number of Civil Service positions designated as Data Scientist positions under job series 1560*	*0*	**100 positions**	**Coming FY22 Q4**
Number of uses of data assets housed on M/SS/CfA common infrastructure. Uses is defined as downloads, user sessions, views, and other relevant methods for interacting with myriad data products across multiple platforms.	*NA*	**72,523**	**89,588**
Number of organizational units below the bureau/office level leveraging common Analytics infrastructure (Including but not limited to: Tableau, Azure, ArcGIS, databricks, etc.)	*68*	**82**	**110**
Number of data assets available on data.state.sbu	*193*	**324**	**520**

*The Department hired a cohort of data scientists before the creation of the OPM 1560 Data Science series that we expect to be captured by this indicator after its launch. For additional information about this hiring please click here
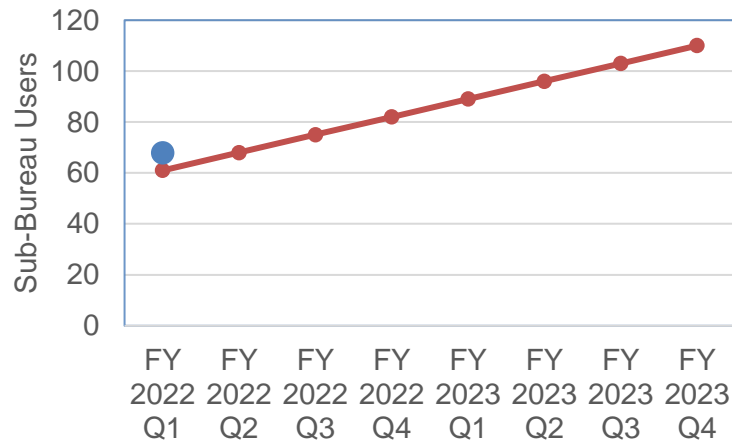
Key indicators
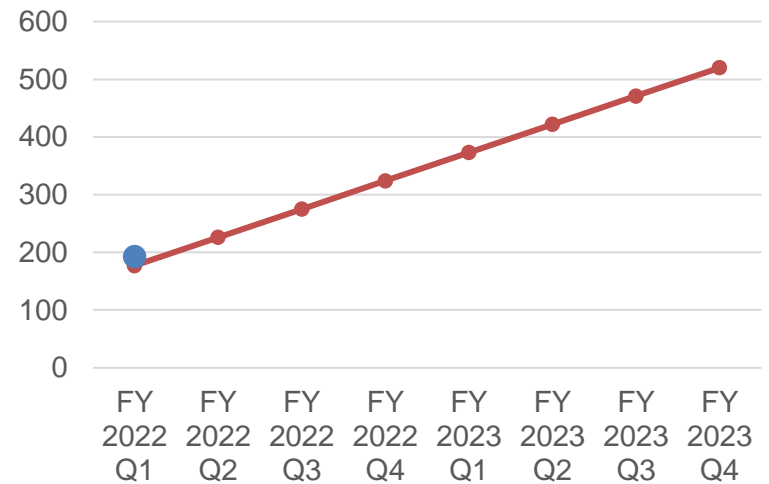

Number of Person-Hours Trained
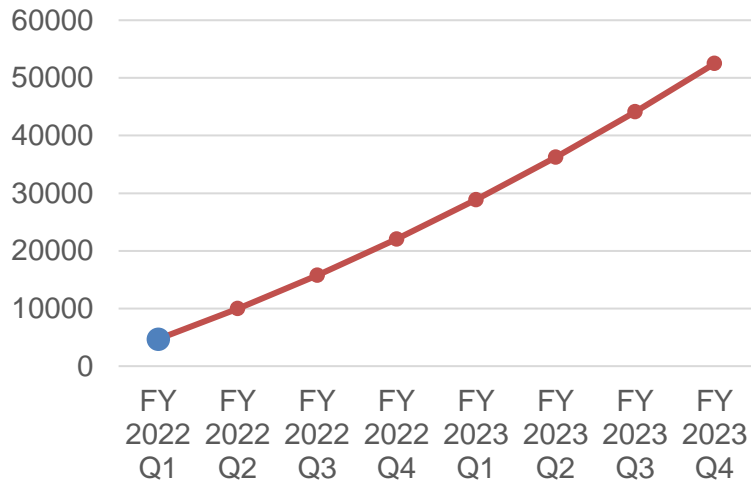
Number of Uses of Data Assets
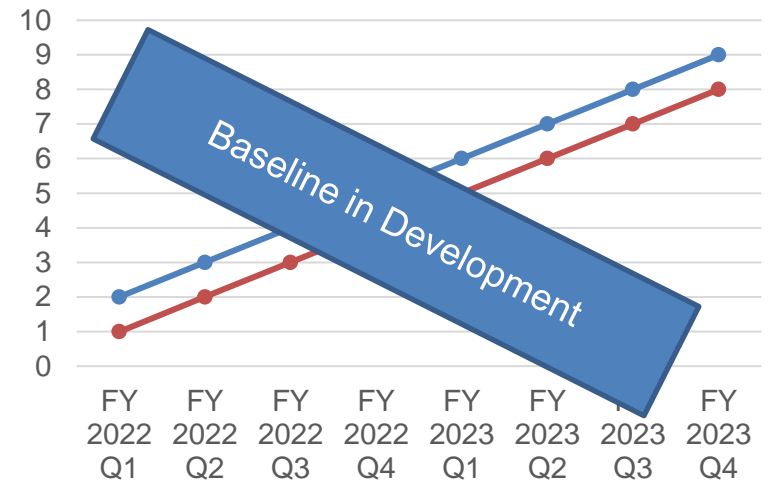
Baseline in Development

Number of Organizational Units Leveraging Analytics Infrastructure

Number of Data Assets

Actual — Target

Key indicators
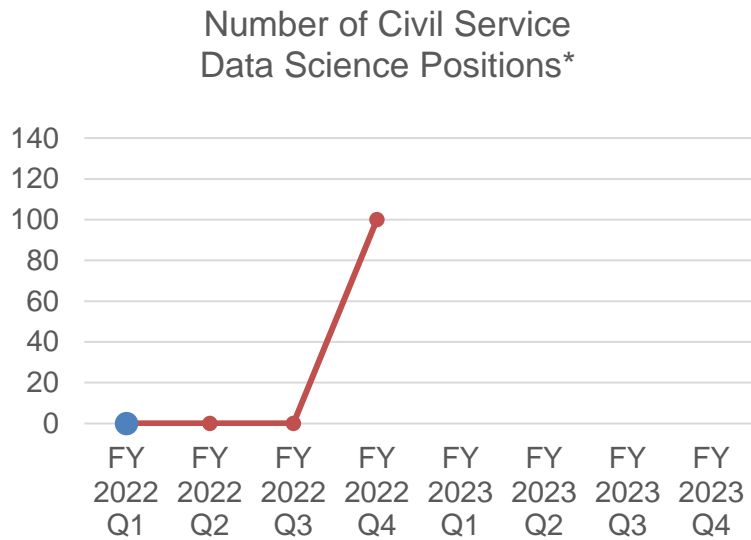
Number of Civil Service Data Science Positions*

Legend: Actual (blue), Target (red)

*The Department hired a cohort of data scientists before the creation of the OPM 1560 Data Science series that we expect to be captured by this indicator after its launch. For additional information about this hiring please click here

Key milestones

Milestone Summary				
Key Milestone	**Milestone Due Date** *[e.g., Q2, FY 2017]*	**Milestone Status** *[e.g., Complete, On-Track, Missed]*	**Owner** *[optional column]*	**Comments** *[Provide discussion of Progress, changes from last update, Anticipated Barriers or other Issues Related to Milestone Completion]*
Officially launch Data.State, the Department workforce's interface to the data inventory and data catalogue.	**Q1, FY 2022**	**Complete**	**MSS**	**Successfully launched data.state; this is a necessary precursor to making data assets and tools more available to the Department workforce.**
Launch pilot program with external data analytics training platform.	Q2, FY 2022	NA	MSS	
Develop new discrete data and analytics training modules to include in existing internal training courses for civil servants, FSOs, and Chiefs of Mission.	Q3, FY 2022	NA	MSS/FSI	
Update Department data policy in the FAM.	Q2, FY 2022	NA	MSS	
Publish enterprise guidance on data policy and management via ALDAC or issue paper.	Q3, FY 2022	NA	MSS	
Integrate campaign data assets from Management and Mission themes.	Q4, FY 2022	NA	MSS	
Complete four data campaigns (two mission and two management) by end of FY2022.	Q4, FY 2022	NA	MSS	
Develop and implement in partnership with industry, scalable data science training services via virtual training platforms.	**Q1, FY 2023**	**On-Track**	**MSS/FSI**	**Currently in pilot stage with industry partner**
Find and share to the enterprise existing analytics products from other bureaus.	**Q1, FY 2022 - Q4, FY 2023**	**Complete**	**MSS**	**This is a recurring milestone. Completion status will be reassessed every quarter.**
Integrate campaign data assets from Management and Mission themes.	Q4, FY 2023	NA	MSS	
Complete four data campaigns (two mission and two management) by end of FY2023.	Q4, FY 2023	NA	MSS	

Narrative – FY 22 Q1

I. **Key Indicators (slide 4)**

The following narrative provides an overview of the quantitative indicators outlined on slide 4.

Number of Person-Hours Trained. The number of person-hours trained was 4,702 in Q1. The target for Q1 was 4,725 person-hours trained. While the Department did not meet its target for Q1, the trend aligns with lower training figures in FY 2021 Q1, and the Department anticipates adding additional training opportunities in the coming months to make up for the Q1 lag.

Number of Organizational Units Leveraging Analytics Infrastructure. Thirteen organizational units below the bureau/office level leveraged common analytics infrastructure in Q1. When combined with the starting value of 55, the cumulative value reached 68 meeting the Q1 target.

Number of Data Assets. Sixty-four data assets became available on data.state.sbu in Q1. When combined with the starting value of 129, the cumulative value reached 193 surpassing the Q1 target of 130.

II. **Key Milestones (slide 10)**

The following narrative provides an overview of the milestones that are due in Q1.

Data.State Official Launch. Data.State was successfully launched meeting the FY22 Q1 deadline. Data assets and tools can now become more available to the Department workforce.

Develop & Implement Data Science Training Services. This milestone is on-track. 119 data science training services were developed via virtual platforms in partnership with industry during Q1, and we anticipate this number to increase significantly during the upcoming quarters.

Share Existing Analytics Products. This milestone is on-track. Four new analytics products were added to data.state and made available to the enterprise in Q1.

Data accuracy & reliability

Data Source	Accuracy	Reliability	Notes
Goal Strategy #1: Cultivate a Data Culture			
• Foreign Service Institute Course Attendance	High	Med	Will be used to determine person-hours trained at Department-sponsored courses
• M/SS/CfA events attendance log	Med	High	Will be used to determine person-hours trained at Department-sponsored training events
• Subscription-based external training platform	High	High	Will be used to determine person-hours trained using third-party software
Goal Strategy #2: Accelerate Decisions through Analytics			
• Enterprise Data Architecture	High	High	Will be used to determine the number of organizational units leveraging common infrastructure
• Enterprise Data Inventory	High	High	Will be used to determine number of uses of data and analytics products
Goal Strategy #3: Establish Mission-Driven Data Management			
• Data Inventory	High	High	Will be used to determine number of assets available
Goal Strategy #4: Enhance Enterprise Data Governance			
• Foreign Affairs Manual	High	High	Will be used to determine if Department has updated its data policy

Additional information

Contributing Programs				
Organizations	**Program Activities**	**Regulations**	**Policies**	**Other Federal Activities**
• Office of Management Strategy and Solution (M/SS) • Enterprise Data Council (EDC) • Bureau of Information Resource Management (IRM) • Foreign Service Institute (FSI) • Bureau for Global talent Management (GTM)	• Cultivate a Data Culture • Accelerate Decisions through Analytics • Establish Mission-Driven Data Management • Enhance Data Governance	• Federal Data Strategy 2020 Action Plan • Geospatial Data Strategy Act of 2018 • Foundations for Evidence-Based Policymaking Act of 2018	• OMB M 13-13 • OMB M 19-23 • OMB M 22-09	• President's Management Agenda (PMA)